I.1
11/14/94

BLACK & VEATCH Waste Science, Inc.

101 North Wacker Drive, Suite 1100, Chicago, Illinois 60606, (312) 346-3775, Fax: (312) 346-4781

City of Chicago
General Iron

BVWS Project 40500.410
BVWS File C.3
November 14, 1994

Mr. David R. Inman
Assistant Commissioner
Department of Environment
Enforcement and Compliance Division
320 North Clark Street, Room 600A
Chicago, Illinois 60610

Subject: Sampling Visit Summary and Results of Sample Analyses

Dear Mr. Inman:

Black & Veatch Waste Science, Inc. (BVWS), is pleased to submit this letter report describing the August 24, 1994, sampling effort at the General Iron site and summarizing our findings. The site is at 1909 N. Clifton, Chicago, Illinois.

Planned Activities

Planned activities included inspection of the northern and southern yards, identification of sample locations, and collection of soil, shredder fluff, and sediment samples for chemical analyses or visual description. Sediment samples were to be collected from the Chicago River from locations on the western side of the southern yard.

Reconnaissance

The sampling team, city inspector, and General Iron legal counsel and company representatives met in a General Iron office to discuss planned activities. The city legal counsel arrived as the inspection of the northern yard was beginning. A General Iron representative accompanied the sampling team, city inspector, and city legal counsel on a tour of the northern yard. General Iron's environmental consultant arrived during the northern yard reconnaissance. General Iron's legal counsel, environmental consultant (W.Z. Baumgartner & Associates, Inc.), and additional representatives then accompanied the sampling team and city officials on an inspection tour of the southern yard. Photographs were taken of site conditions in both yards.

Field Sampling

Following the site reconnaissance, the sampling equipment was prepared and samples were collected in the southern and northern yards. General Iron's legal counsel, environmental consultant, and other representatives accompanied the sampling team to each sample location.

Shredder fluff sample FF01 is a composite of samples collected at four locations on top of the largest pile of shredder fluff. The remaining two shredder fluff samples (FF02 and FF03)were collected at locations near the river, on the western side of the southern yard. One soil sample (SS01) was collected in oil stained soil in the southeastern corner of the southern yard. The two remaining soil samples (SS02 and SS03) were collected in oil-stained soil at locations near the northern side of the northern yard. Quality control samples include two rinsate blanks (RB01 and RB02) and a trip blank (TB01).

Repeated attempts were made to collect sediment samples from the river at two locations in the southern yard. All attempts failed to collect any sediment. At the southern location, the sampler could not penetrate the sediment surface and the sediment surface was covered with rubble at the northern sample location.

General Iron's environmental consultant accepted split samples at all sample locations; however, splits of quality control samples and the shredder fluff sample scheduled for grain size analysis were declined.

Photocopies of the field log book pages are attached to this report.

Laboratory Analysis

Samples were delivered to analytical laboratories on August 25, 1994. Grace Analytical Lab, Inc., analyzed selected samples for polychlorinated biphenyls (PCBs) and Resource Conservation and Recovery Act (RCRA) waste characteristics: reactivity, ignitability, corrosivity, and toxicity. RCRA toxicity analysis consisted of full scan analyses of toxicity characteristic leaching procedure (TCLP) volatile and semivolatile organic compounds, pesticides, herbicides, and metals. Samples selected for dioxin, volatile organic compounds (VOCs), and grain size analyses were delivered to Packer Engineering, Inc. (Packer). Packer's grain size analysis focused on the presence of particulate matter less than 10 microns in diameter. Packer performed combustion emissions testing of the shredder fluff samples. Packer heated the shredder fluff and captured the vapor emissions. The vapor emissions were analyzed by First Environmental Laboratories, Inc., for VOCs. The data from these analyses is complete, and is attached to this letter. Samples were analyzed for the parameters listed in the following table.

Sample		Analyses							
Location	Type	RCRA Characteristics				Dioxin	PCBs	VOCs	Grain Size
		Ignitability	Corrosivity	Reactivity	Toxicity				
FF01	Composite	X	X	X	X	X	X	X	X
FF02	Grab	X	X	X	X	X		X	
FF03	Grab	X	X	X	X	X		X	
SS01	Grab						X		
SS02	Grab						X		
SS03	Grab						X		
RB01	Grab	X	X	X	X		X		
RB02	Grab					X		X	
TB01	Grab				TCLP VOCs				

Findings

The shredder fluff fails to meet requirements for a RCRA-classified hazardous waste. The RCRA hazardous waste characteristic of ignitability is defined, in part, as a liquid with a flashpoint of less than 140° Fahrenheit, or a nonliquid substance capable, under standard temperature and pressure, of igniting through friction, absorption of moisture, or spontaneous chemical changes, and of burning so vigorously as to create a hazard. The flashpoint of shredder fluff in the samples (FF01-03) is less than 212° Fahrenheit. The shredder fluff is not a corrosive substance; it is slightly alkaline, with pH values ranging from 8.09 to 8.46 in the shredder fluff samples. Reactive cyanide was not detected, but reactive sulfide was detected in all three shredder fluff samples at concentrations ranging from 1.6 to 4.8 milligrams per kilogram. Cyanide and sulfide appear to be present at insufficient concentrations required to generate toxic gas. TCLP volatile and semivolatile compounds, pesticides, and herbicides were not detected. Arsenic, barium, cadmium, lead, and mercury were detected; however, the detected concentrations are below maximum limits used to establish RCRA hazardous waste. These limits are specified in the Code of Federal Regulations, Title 40, Part 261.24.

A PCB was detected in all shredder fluff and soil samples submitted for PCB analysis. Aroclor 1242 was detected at levels ranging from 23.2 to 42 parts per million (ppm) in soil from locations SS01, SS02, and SS03, and at 101 ppm in the shredder fluff composite sample (FF01). An action level of 50 ppm is specified in the Toxic Substance Control Act to initiate

regulation of PCB spills. Data validation was performed on the PCB data, and it is determined to be acceptable as reported.

Analysis of vapor emissions from combustion of shredder fluff detected only three VOCs: acetone, chloromethane, and methylene chloride. Acetone and methylene chloride are common laboratory contaminants. Reported concentrations of all three VOCs are well below established exposure limits established by the Occupational Safety and Health Administration and the American Conference of Governmental and Industrial Hygienists. Twelve additional compounds were identified in a library search; however, their reported concentrations are estimated and their identification is tentative.

A grain size analysis of the shredder fluff failed to detect any individual constituent particles less than 10 microns in size. The laboratory reported some larger particles appear to be agglomerations of smaller components, and suggested the particles are coated with an insulating medium which binds them together.

Fluff from all three shredder fluff sample locations was analyzed for dioxin. Dioxin was not detected in any of the samples.

No organic or inorganic compounds were detected in the trip and rinsate blanks.

Summary

Data from the analysis of samples collected at General Iron on August 24, 1994, show only one PCB (Aroclor 1242) is present at a level in excess of established regulatory action levels. The sample containing the elevated level of PCB was a composite sample collected from four separate locations on the surface of the shredder fluff pile. All other detected compounds were quantified at low concentrations below any regulatory standards.

Please call me at (313) 346-3775 if you need further information.

Very truly yours,

BLACK & VEATCH Waste Science, Inc.

John Chitwood for Scott Anderson

Scott W. Anderson
Project Manager

cc: Arlene Martin, w/Enclosure

SWA/JPC

GRACE ANALYTICAL LAB, INC.
5300-B McDermott Drive, Berkeley, Illinois 60163 Tel (708) 449-9449, Fax (708) 449-3663

TCLP VOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: Black & Veatch - 40500.410, General Iron US EPA METHOD: 1311

SAMPLE I.D. NO: Lab Blank FILE REF. NO: >V9912

DATE RECEIVED: DATE ANALYZED: 09-01-94

	CAS #	COMPOUND	AMOUNT (MG/L)
1.	71-43-2	BENZENE	0.02 U
2.	56-23-5	CARBON TETRACHLORIDE	0.02 U
3.	108-90-7	CHLOROBENZENE	0.5 U
4.	67-66-3	CHLOROFORM	0.02 U
5.	107-06-2	1,2-DICHLOROETHANE	0.1 U
6.	75-35-4	1,1-DICHLOROETHENE	0.02 U
7.	78-93-3	2-BUTANONE (MEK)	2.0 U
8.	127-18-4	TETRACHLOROETHENE	0.02 U
9.	79-01-6	TRICHLOROETHENE	0.02 U
10.	75-01-4	VINYL CHLORIDE	0.02 U

CODES: U - COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE VALUE REPORTED IS THE METHOD DETECTION LIMIT.
J - ESTIMATED VALUE
SLC - SUSPECTED LABORATORY CONTAMINANT
SFC - SUSPECTED FIELD CONTAMINANT

Analysis Certified By: _____ Laboratory Director

GRACE ANALYTICAL LAB, INC.
5300-B McDermott Drive, Berkeley, Illinois 60163 Tel (708) 449-9449, Fax (708) 449-3663

TCLP VOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: Black & Veatch - 40500.410, General Iron US EPA METHOD: 1311

SAMPLE I.D. NO: GI-TB01-201 FILE REF. NO: >V9913

DATE RECEIVED: 08-25-94 DATE ANALYZED: 09-01-94

	CAS #	COMPOUND	AMOUNT (MG/L)
1.	71-43-2	BENZENE	0.02 U
2.	56-23-5	CARBON TETRACHLORIDE	0.02 U
3.	108-90-7	CHLOROBENZENE	0.5 U
4.	67-66-3	CHLOROFORM	0.02 U
5.	107-06-2	1,2-DICHLOROETHANE	0.1 U
6.	75-35-4	1,1-DICHLOROETHENE	0.02 U
7.	78-93-3	2-BUTANONE (MEK)	2.0 U
8.	127-18-4	TETRACHLOROETHENE	0.02 U
9.	79-01-6	TRICHLOROETHENE	0.02 U
10.	75-01-4	VINYL CHLORIDE	0.02 U

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TCLP VOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: Black & Veatch - 40500.410, General Iron US EPA METHOD: 1311

SAMPLE I.D. NO: GI-RB01-201 FILE REF. NO: >V9914

DATE RECEIVED: 08-25-94 DATE ANALYZED: 09-01-94

	CAS #	COMPOUND	AMOUNT (MG/L)
1.	71-43-2	BENZENE	0.02 U
2.	56-23-5	CARBON TETRACHLORIDE	0.02 U
3.	108-90-7	CHLOROBENZENE	0.5 U
4.	67-66-3	CHLOROFORM	0.02 U
5.	107-06-2	1,2-DICHLOROETHANE	0.1 U
6.	75-35-4	1,1-DICHLOROETHENE	0.02 U
7.	78-93-3	2-BUTANONE (MEK)	2.0 U
8.	127-18-4	TETRACHLOROETHENE	0.02 U
9.	79-01-6	TRICHLOROETHENE	0.02 U
10.	75-01-4	VINYL CHLORIDE	0.02 U

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TCLP VOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: Black & Veatch - 40500.410, General Iron US EPA METHOD: 1311

SAMPLE I.D. NO: GI-FF01-001 FILE REF. NO: >V9915

DATE RECEIVED: 08-25-94 DATE ANALYZED: 09-01-94

	CAS #	COMPOUND	AMOUNT (MG/L)
1.	71-43-2	BENZENE	0.02 U
2.	56-23-5	CARBON TETRACHLORIDE	0.02 U
3.	108-90-7	CHLOROBENZENE	0.5 U
4.	67-66-3	CHLOROFORM	0.02 U
5.	107-06-2	1,2-DICHLOROETHANE	0.1 U
6.	75-35-4	1,1-DICHLOROETHENE	0.02 U
7.	78-93-3	2-BUTANONE (MEK)	2.0 U
8.	127-18-4	TETRACHLOROETHENE	0.02 U
9.	79-01-6	TRICHLOROETHENE	0.02 U
10.	75-01-4	VINYL CHLORIDE	0.02 U

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TCLP VOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: Black & Veatch - 40500.410, General Iron US EPA METHOD: 1311

SAMPLE I.D. NO: GI-FF02-001 FILE REF. NO: >V9918

DATE RECEIVED: 08-25-94 DATE ANALYZED: 09-01-94

	CAS #	COMPOUND	AMOUNT (MG/L)
1.	71-43-2	BENZENE	0.02 U
2.	56-23-5	CARBON TETRACHLORIDE	0.02 U
3.	108-90-7	CHLOROBENZENE	0.5 U
4.	67-66-3	CHLOROFORM	0.02 U
5.	107-06-2	1,2-DICHLOROETHANE	0.1 U
6.	75-35-4	1,1-DICHLOROETHENE	0.02 U
7.	78-93-3	2-BUTANONE (MEK)	2.0 U
8.	127-18-4	TETRACHLOROETHENE	0.02 U
9.	79-01-6	TRICHLOROETHENE	0.02 U
10.	75-01-4	VINYL CHLORIDE	0.02 U

CODES: U - COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE VALUE REPORTED IS THE METHOD DETECTION LIMIT.
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TCLP VOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: Black & Veatch - 40500.410, General Iron US EPA METHOD: 1311

SAMPLE I.D. NO: GI-FF03-001 FILE REF. NO: >V9919

DATE RECEIVED: 08-25-94 DATE ANALYZED: 09-01-94

	CAS #	COMPOUND	AMOUNT (MG/L)
1.	71-43-2	BENZENE	0.02 U
2.	56-23-5	CARBON TETRACHLORIDE	0.02 U
3.	108-90-7	CHLOROBENZENE	0.5 U
4.	67-66-3	CHLOROFORM	0.02 U
5.	107-06-2	1,2-DICHLOROETHANE	0.1 U
6.	75-35-4	1,1-DICHLOROETHENE	0.02 U
7.	78-93-3	2-BUTANONE (MEK)	2.0 U
8.	127-18-4	TETRACHLOROETHENE	0.02 U
9.	79-01-6	TRICHLOROETHENE	0.02 U
10.	75-01-4	VINYL CHLORIDE	0.02 U

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TCLP SEMIVOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: Black & Veatch, 40500.410, General Iron US EPA METHOD: 1311/8270

SAMPLE I.D. NO: Lab Blank FILE REF. NO: >A5112

DATE RECEIVED: DATE ANALYZED: 08-31-94

	CAS #	COMPOUND	AMOUNT (MG/L)	
1.	110-86-1	PYRIDINE	1.0	U
2.	106-46-7	1,4-DICHLOROBENZENE	1.0	U
3.	121-14-2	2,4-DINITROTOLUENE	0.1	U
4.	118-74-1	HEXACHLOROBENZENE	0.1	U
5.	87-68-3	HEXACHLOROBUTADIENE	0.2	U
6.	67-72-1	HEXACHLOROETHANE	1.0	U
7.	95-48-7	2-METHYLPHENOL	2.0	U
8.	108-39-4	3-METHYLPHENOL	2.0	U
9.	106-44-5	4-METHYLPHENOL	2.0	U
10.	98-95-3	NITROBENZENE	0.1	U
11.	87-86-5	PENTACHLOROPHENOL	1.0	U
12.	95-95-4	2,4,5-TRICHLOROPHENOL	1.0	U
13.	88-06-2	2,4,6-TRICHLOROPHENOL	0.2	U

COl : U - COMPOUND WAS ANALYZED FOR, BUT NOT DETECTED.
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TCLP SEMIVOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: Black & Veatch, 40500.410, General Iron US EPA METHOD: 1311/8270

SAMPLE I.D. NO: GI-RB01-201 FILE REF. NO: >A5113

DATE RECEIVED: 08-25-94 DATE ANALYZED: 08-31-94

	CAS #	COMPOUND	AMOUNT (MG/L)	
1.	110-86-1	PYRIDINE	1.0	U
2.	106-46-7	1,4-DICHLOROBENZENE	1.0	U
3.	121-14-2	2,4-DINITROTOLUENE	0.1	U
4.	118-74-1	HEXACHLOROBENZENE	0.1	U
5.	87-68-3	HEXACHLOROBUTADIENE	0.2	U
6.	67-72-1	HEXACHLOROETHANE	1.0	U
7.	95-48-7	2-METHYLPHENOL	2.0	U
8.	108-39-4	3-METHYLPHENOL	2.0	U
9.	106-44-5	4-METHYLPHENOL	2.0	U
10.	98-95-3	NITROBENZENE	0.1	U
11.	87-86-5	PENTACHLOROPHENOL	1.0	U
12.	95-95-4	2,4,5-TRICHLOROPHENOL	1.0	U
13.	88-06-2	2,4,6-TRICHLOROPHENOL	0.2	U

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SFC - SUSPECTED FIELD CONTAMINANT

Analysis Certified By: _____ Laboratory Director

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TCLP SEMIVOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: Black & Veatch, 40500.410, General Iron US EPA METHOD: 1311/8270

SAMPLE I.D. NO: GI-FF01-001 FILE REF. NO: >A5114

DATE RECEIVED: 08-25-94 DATE ANALYZED: 08-31-94

	CAS #	COMPOUND	AMOUNT (MG/L)	
1.	110-86-1	PYRIDINE	1.0	U
2.	106-46-7	1,4-DICHLOROBENZENE	1.0	U
3.	121-14-2	2,4-DINITROTOLUENE	0.1	U
4.	118-74-1	HEXACHLOROBENZENE	0.1	U
5.	87-68-3	HEXACHLOROBUTADIENE	0.2	U
6.	67-72-1	HEXACHLOROETHANE	1.0	U
7.	95-48-7	2-METHYLPHENOL	2.0	U
8.	108-39-4	3-METHYLPHENOL	2.0	U
9.	106-44-5	4-METHYLPHENOL	2.0	U
10.	98-95-3	NITROBENZENE	0.1	U
11.	87-86-5	PENTACHLOROPHENOL	1.0	U
12.	95-95-4	2,4,5-TRICHLOROPHENOL	1.0	U
13.	88-06-2	2,4,6-TRICHLOROPHENOL	0.2	U

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Analysis Certified By: _____ Laboratory Director

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TCLP SEMIVOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: Black & Veatch, 40500.410, General Iron US EPA METHOD: 1311/8270

SAMPLE I.D. NO: GI-FF02-001 FILE REF. NO: >A5115

DATE RECEIVED: 08-25-94 DATE ANALYZED: 08-31-94

	CAS #	COMPOUND	AMOUNT (MG/L)	
1.	110-86-1	PYRIDINE	1.0	U
2.	106-46-7	1,4-DICHLOROBENZENE	1.0	U
3.	121-14-2	2,4-DINITROTOLUENE	0.1	U
4.	118-74-1	HEXACHLOROBENZENE	0.1	U
5.	87-68-3	HEXACHLOROBUTADIENE	0.2	U
6.	67-72-1	HEXACHLOROETHANE	1.0	U
7.	95-48-7	2-METHYLPHENOL	2.0	U
8.	108-39-4	3-METHYLPHENOL	2.0	U
9.	106-44-5	4-METHYLPHENOL	2.0	U
10.	98-95-3	NITROBENZENE	0.1	U
11.	87-86-5	PENTACHLOROPHENOL	1.0	U
12.	95-95-4	2,4,5-TRICHLOROPHENOL	1.0	U
13.	88-06-2	2,4,6-TRICHLOROPHENOL	0.2	U

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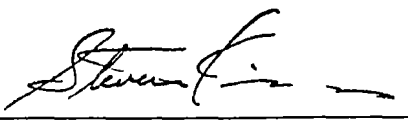
Analysis Certified By:  Laboratory Director

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TCLP SEMIVOLATILES ORGANIC ANALYSIS DATA SHEET

STUDY NAME: Black & Veatch, 40500.410, General Iron US EPA METHOD: 1311/8270

SAMPLE I.D. NO: GI-FF03-001 FILE REF. NO: >A5116

DATE RECEIVED: 08-25-94 DATE ANALYZED: 08-31-94

	CAS #		COMPOUND	AMOUNT (MG/L)	
1.	110-86-1	--------	PYRIDINE ----------	1.0	U
2.	106-46-7	--------	1,4-DICHLOROBENZENE ----------	1.0	U
3.	121-14-2	--------	2,4-DINITROTOLUENE ----------	0.1	U
4.	118-74-1	--------	HEXACHLOROBENZENE ----------	0.1	U
5.	87-68-3	---------	HEXACHLOROBUTADIENE ----------	0.2	U
6.	67-72-1	---------	HEXACHLOROETHANE ----------	1.0	U
7.	95-48-7	---------	2-METHYLPHENOL ----------	2.0	U
8.	108-39-4	--------	3-METHYLPHENOL ----------	2.0	U
9.	106-44-5	--------	4-METHYLPHENOL ----------	2.0	U
10.	98-95-3	---------	NITROBENZENE ----------	0.1	U
11.	87-86-5	---------	PENTACHLOROPHENOL ----------	1.0	U
12.	95-95-4	---------	2,4,5-TRICHLOROPHENOL ----------	1.0	U
13.	88-06-2	---------	2,4,6-TRICHLOROPHENOL ----------	0.2	U

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J - ESTIMATED VALUE
SLC - SUSPECTED LABORATORY CONTAMINANT
SFC - SUSPECTED FIELD CONTAMINANT

Analysis Certified By: _____ Laboratory Director

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TCLP METALS ANALYSIS DATA SHEET

PROJECT NAME. Black & Veatch - 40500 410, General Iron
Date Received. 08/25/94

	RESULTS (MG/L)			
PARAMETER	GI-RB01-201	GI-FF01-001	GI-FF02-001	GI-FF03-001
As	<0 002	0 0036	<0 002	<0 002
Ba	<0 05	0 475	1.42	1 17
Cd	<0 01	0 239	0 265	0 507
Cr	<0 02	<0 02	<0 02	<0 02
Pb	<0 1	0 119	0 257	0 746
Hg	<0 0002	<0 0002	<0.0002	0 000214
Se	<0 002	<0 002	<0 002	<0 002
Ag	<0 01	<0 01	<0 01	<0 01

Dates of analysis		USEPA Method	
	As - 09/06/94		As - 1311/200 9
	Ba - 09/01/94		Ba - 1311/200 7
	Cd - 08/31/94		Cd - 1311/200 7
	Cr - 08/31/94		Cr - 1311/200.7
	Pb - 08/31/94		Pb - 1311/200 7
	Hg - 09/02/94		Hg - 1311/245 1
	Se - 09/06/94		Se - 1311/200 9
	Ag - 09/01/94		Ag - 1311/200 7

Analysis Certified By _____ Laboratory Director
Reported By DJ

GRACE ANALYTICAL LAB, INC.
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METALS ANALYSIS QC DATA SHEET

PROJECT NAME. Black & Veatch - 40500.410, General Iron

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Parameter	Sample Result in mg/L (GI-FF01-001, TCLP Extract)	Spike Added in mg/L	Spiked Sample Result in mg/L	Matrix Spike % Recovery	Matrix Spike Duplicate Result in mg/L	Relative % Difference
As	0 0036	0 200	0 209	103	0 184	12 7
Ba	0 475	0 200	0 668	96.5	0 654	2 1
Cd	0 239	0 200	0 424	92 5	0 438	3 2
Cr	<0 02	0 200	0 205	103	0 203	1 0
Pb	0 119	0 200	0 299	90 0	0 296	1 0
Hg	<0 0002	0 00300	0 00320	107	0 00311	2 9
Se	<0 002	0 200	0 245	123	0 174	33 9*
Ag	<0 01	0 200	0 205	103	0 206	0 5

Matrix Spike % Recovery Control Limits ±25%
Relative % Difference Control Limits ±20%

*Value outside of control limits

Matrix Spike % Recovery = [(Spiked Sample Result - Sample Result)/Spike Added]x100%

Rel % Diff = [(MS Result - MSD Result)/(MS Result + MSD Result)x(0 5)]x100%

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METALS ANALYSIS QC DATA SHEET

PROJECT NAME Black & Veatch - 40500 410, General Iron

INITIAL CALIBRATION VERIFICATION SAMPLE RESULTS

PARAMETER	RESULT (MG/L)	ACCEPTABLE RANGE (MG/L)	USEPA METHOD	DATE OF ANALYSIS
As	0 0773	0 0675 - 0 0825	200.9	09/06/94
Ba	1 04	0 9 - 1 1	200 7	09/01/94
Cd	1 04	0 9 - 1 1	200 7	08/31/94
Cr	1 03	0 9 - 1 1	200.7	08/31/94
Pb	1 02	0 9 - 1 1	200.7	08/31/94
Hg	0 00311	0 0027 - 0 0033	245 1	09/02/94
Se	0 0470	0 045 - 0 055	200 9	09/06/94
Ag	1 03	0 9 - 1 1	200 7	09/01/94

Analysis Certified By _____ Laboratory Director
Reported By DJ

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INORGANICS ANALYSIS DATA SHEET

PROJECT NAME Black & Veatch - 40500 410, General Iron
Date Received 08/25/94

	RESULTS (MG/L)			
PARAMETER	GI-RB01-201	GI-FF01-001	GI-FF02-001	GI-FF03-001
Flashpoint	<212°F	<212°F	<212°F	<212°F
Reactive CN	<0 5 mg/kg	<0 5 mg/kg	<0 5 mg/kg	<0 5 mg/kg
Reactive S	<1 mg/kg	1 6 mg/kg	3 2 mg/kg	4.8 mg/kg
pH	5 80	8 09	8 14	8 46

Dates of analysis
Flashpoint - 09/06/94
Reactive CN - 09/01/94
Reactive S - 08/31/94
pH - 08/31/94

USEPA Method.
Flashpoint - 1010
Reactive CN - 7 3 3 2
Reactive S - 7 3 4 1
pH - 9040, 9045

Analysis Certified By _____ Laboratory Director
Reported By DJ